

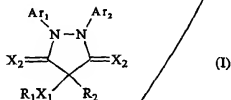
Art. 37

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ClaimsSub
A1

1. The use of a compound of formula I



(where each X_2 , which may be the same or different is O or S,

X_1 is O, OO or S,

R_1 is hydrogen or a hydroxyl or thiol protecting group,

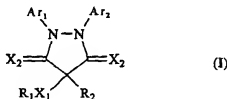
R_2 is hydrogen or a alkyl, alkenyl, alkynyl, alkaryl, aralkyl or aralkenyl group, containing up to 10 carbons, optionally substituted by a sulphonyl group, and each of

Ar_1 and Ar_2 , which may be the same or different, is a homo or heterocyclic aromatic group comprising 5 to 7 membered aromatic ring, optionally carrying a fused aromatic ring and optionally substituted on ring atoms by C_{1-6} alkyl, hydroxy, thiol, C_{1-6} alkoxy, cyano, Cl, F, Br, I, protected hydroxy, or protected thiol), or a physiologically acceptable salt thereof, for the manufacture of a medicament for use in therapy or prophylaxis.

2. A method of treatment of the human or non-human body to combat an inflammatory or viral disease, which method comprises administering to said body a compound of formula I

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(where each X_2 , which may be the same or different is O or S,

X_1 is O, OO or S,

R_1 is hydrogen or a hydroxyl or thiol protecting group,
 R_2 is hydrogen or a alkyl, alkenyl, alkynyl, alkaryl, aralkyl or aralkenyl group, containing up to 10 carbons, optionally substituted by a sulphonyl group, and each of Ar_1 and Ar_2 , which may be the same or different, is a homo or heterocyclic aromatic group comprising 5 to 7 membered aromatic ring, optionally carrying a fused aromatic ring and optionally substituted on ring atoms by C_{1-6} alkyl, hydroxy, thiol, C_{1-6} alkoxy, cyano, Cl, F, Br, I, protected hydroxy, or protected thiol), or a physiologically acceptable salt thereof.

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Q2

3. A method as claimed in claim 2 comprising administering said compound, or a physiologically acceptable salt thereof in combination with another antiviral agent.
4. A method as claimed in claim 3 wherein said additional antiviral agent is at least one antiviral agent selected from a reverse transcriptase inhibitor and a protease inhibitor.
5. A method as claimed in claim 3 wherein said additional antiviral agent is an agent selected from the group of AZT, indinavir, nevirapine and 2',3'-dideoxyinosine (ddI).

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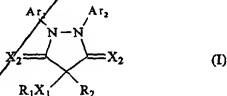
6. A method as claimed in any of claims 2 to 5 wherein said disease is a disease caused by a pathogen from the group of togaviridea, reoviridea, picornaviridea, hantaviridea, orthomyxoviridea, paramyxoviridea, mononegaviralis, viral hepatitis, haemorrhagic fevers, flaviviridea, viral encephalitis, coronaviridea, calciviridea, adenoviridea, papovaviridea, arboviridea, pox virus, rhabdoviridea, arenaviridea HIV-1, HIV-2, HTLV-I, HTLV-II and herpes viruses.

7. A method of combatting HIV infection which comprises administering to an HIV-infected patient a T-lymphocyte growth suppressing agent in an amount sufficient to suppress T-lymphocyte growth in said patient for a period sufficient to reduce the T-lymphocyte concentration in the lymphatic system in said patient by at least 25% said administration being repeated at intervals of at least 3 months.

Sub Q3 8. A method of combatting HIV infection as claimed in claim 7 wherein said T-lymphocyte growth suppressing agent is a pyrazolidinol.

9. A method as claimed in claim 7 or claim 8 wherein said interval is at least 9 months.

10. A method as claimed in any of claims 7 to 9 wherein a compound of formula I



(where each X_2 , which may be the same or different is O or S,

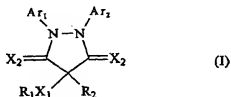
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X_1 is O, OO or S,

R_1 is hydrogen or a hydroxyl or thiol protecting group,

R_2 is hydrogen or a alkyl, alkenyl, alkynyl, alkaryl, aralkyl or aralkenyl group, containing up to 10 carbons, optionally substituted by a sulphonyl group, and each of Ar_1 and Ar_2 , which may be the same or different, is a homo or heterocyclic aromatic group comprising 5 to 7 membered aromatic ring, optionally carrying a fused aromatic ring and optionally substituted on ring atoms by C_{1-6} alkyl, hydroxy, thiol, C_{1-6} alkoxy, cyano, Cl, F, Br, I, protected hydroxy, or protected thiol), or a physiologically acceptable salt thereof is administered in a daily dose of 0.1 to 10 $\mu\text{mol/Kg}$ bodyweight.

11. A pharmaceutical composition comprising a compound of formula I



(where each X_2 , which may be the same or different is O or S,

X_1 is O, OO or S,

R_1 is hydrogen or a hydroxyl or thiol protecting group,

R_2 is hydrogen or a alkyl, alkenyl, alkynyl, alkaryl, aralkyl or aralkenyl group, containing up to 10 carbons, optionally substituted by a sulphonyl group, and each of Ar_1 and Ar_2 , which may be the same or different, is a homo or heterocyclic aromatic group comprising 5 to 7 membered aromatic ring, optionally carrying a fused aromatic ring and optionally substituted on ring atoms by C_{1-6} alkyl, hydroxy, thiol, C_{1-6} alkoxy, cyano, Cl, F, Br, I, protected hydroxy, or protected thiol), or a physiologically acceptable salt thereof, together with

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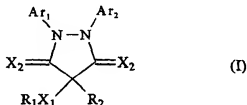
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at least one pharmaceutically acceptable carrier or excipient.

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Of

12. A pharmaceutical composition as claimed in claim 11 additionally comprising another antiviral agent.

13. A compound of formula I



(where each X_2 , which may be the same or different is O or S,

X_1 is O, OO or S,

R_1 is hydrogen or a hydroxyl or thiol protecting group,

R_2 is hydrogen or a alkyl, alkenyl, alkynyl, alkaryl, aralkyl or aralkenyl group, optionally substituted by a sulphonyl group, and

one of Ar_1 and Ar_2 is Ph and the other is 4-hydroxyphenyl,

or a salt thereof, providing that if R_2 is C_6H_5 , R_1 is not H or OH.

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Of

14. A compound as claimed in claim 13 or claim 14 wherein one X_2 group is S.

15. A compound as claimed in either of claims 13 or 14 wherein X_1 is O.

16. A compound as claimed in any of claims 13 to 15 wherein R_1 is acyl.

17. A compound as claimed in any of claims 13 to 16 wherein R_1 is hydrogen.

Art 34

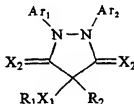
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18. A compound as claimed in claim 13 wherein each X_2 is oxygen, R_1X_1 is HO or $CH_3CO.O$, and R_2 is C_{1-6} alkyl or alkenyl, or a salt thereof.

19. A compound as claimed in any of claims 13 to 18 for use as a medicament.

20. 4-Butyl-4-hydroxy-2(p-hydroxyphenyl)-1-phenyl-3,5-pyrazolidinedione for use as a medicament.

21. A method of treatment of the human or non-human body to combat an autoimmune disease or tissue rejection, which method comprises administering to said body a compound of formula I



(I)

Not
canceled

(where each X_2 , which may be the same or different is O or S,

X_1 is O, OO or S,

R_1 is hydrogen or a hydroxyl or thiol protecting group,

R_2 is hydrogen or a alkyl, alkenyl, alkynyl, alkaryl, aralkyl or aralkenyl group, containing up to 10 carbons, optionally substituted by a sulphonyl group, and each of Ar_1 and Ar_2 , which may be the same or different, is a homo or heterocyclic aromatic group comprising 5 to 7 membered aromatic ring, optionally carrying a fused aromatic ring and optionally substituted on ring atoms by C_{1-6} alkyl, hydroxy, thiol, C_{1-6} alkoxy, cyano, Cl, F, Br, I, protected hydroxy, or protected thiol) or a physiologically tolerable salt thereof.

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21. A method of claim 21 wherein said disease is selected from Addison's disease, Behçet's syndrome, diabetes mellitus, haemolytic anaemia, lupus erythematosus, multiple sclerosis, myasthenia gravis, pernicious anaemia, polyglandular deficiency, polymyositis, dermatomyositis, testicular failure, thrombocytopenic purpura, Crohns disease, ulcerative colitis and rheumatoid arthritis.

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24. A method of claim 21 wherein said tissue rejection is tissue rejection following transplant.